

GTAGGTTTTG GGTGTCGGTG AGATCAGTGT TCGACCGAAA TCCAACGCAT TTTCTAATTT  
GGATTTTCAGA AATCTGGGAG AAGGTAGCAG AATGTCGGAT TCATATGATG ATCGAATGAA  
AGATCATGAT ATGGACGAAC GAGCCCCGAT TGATCCGGCG CCATTCTCGT TAAGTGATCT  
AAAGAAAGCA ATCCCTGCAC ATTGCTTCCG GCGATCCGCC GTCTGGTCAT CCTGCTACGT  
AGTTCAGGAT CTCATTATCA CCTTCCTTTT ATACACGGTC GCCAACACCT ACATTCCTCA  
CCTCCCTCCT CCTCTAGTTT ACTTAGCATG GCCGGTTTAC TGGTTTTGCC AATCTTGCA  
CCTCACTGGT TTATGGGTCC TCGGCCATGA ATGCGGCCAT CATGCCTTTA GTGAGTACCA  
GTGGATTGAT AACGCCGTTG GATTTCGTCT CCATTCGGCT CTCCTCACCC CTTACTTTTC  
TTGGAATAC AGCCATCGAA AGCACCATGC AAACACAAAT TCACTCGAAA ACGAGGAAGT  
TTACATTCCT AGAACTCAGT CCCAGCTCAG GACTTACTCC ACATACGAAT TTCTTGACAA  
CACGCCTGGT CGAATCCTCA TCTTGGTCAT CATGTTAACC TTAGGATTTT CTTTATACCT  
CTTAACGAAT GTTTCAGGCA AGAAGTACGA TAGATTTACC AACCACTTTG ATCCATTGAG  
CCCGATCTTC ACCGAGCGTG AGCGAATCCA GGTGCGTTA TCAGATCTTG GTATCGTTGC  
AGTGTTTTAC GGAATCAAGT TTCTGTACA AACAAAAGGA TTTGGTTGGG TGATGTGCAT  
GTATGGAGTT CCAGTGATAG GTCTGAATTC CTTCAATTATC GTAATCACTT ATCTGCACCA  
CACACATCTG TCGTCACCCC ATTACGATT CACCGAATGG AACTGGATCAAAGGAGCCCT  
GACCACAATC GACAGAGATT TCGGTCTCCT GAATCGGGTT TTCCACGACG TTACACACAC  
CCACGTGTTG CACCATTGTG TTCCCTACAT TCCACATTAT CATGCAAAGG AGGCAAGCCA  
GGCCATCAAG CCAATCTTGG GTGATTACAG GATGATCGAC AGGACTCCAT TTTTCAAAGC  
AATGTGGAGA GAGGCCAAGG AATGCATTTA CATCGAGCAA GATGCAGACA GCAAGCACAA  
AGGGACATAT TGGTACCATA AAATGTAATC GATGATGGAG TTTAGTTGGA AATAATGACA  
TGCAGCATCC CTTTGTATG CTTGAATCGT TCTATTTCTT TATATGTTTT GTAAGATAAA  
TAAGTAAATC TTTGAGTGAA GATGGGGAGC AGGAAACAAG CAGAATATAA TACGCTAAAA  
AAAAAAAAAA AAAAAAAAAA AAAAAA

**Figure 1 :** cDNA sequence of *Stokesia laevis* epoxygenase (SEQ ID No.1).  
The start and the stop codons are underlined

MSDSYDDRMK DHDMDERAPI DPAPFSLSDL KKAIPAHCFR RSAVWSSCYV  
VQDLIITFLL YTVANTYIPH LPPPLVYLAW PVYWFCQSCI LTGLWVLGHE  
CGHHAFSEYQ WIDNAVGFVL HSALLTPYFS WKYSHRKHHA NTNSLENEEV  
YIPRTQSQLR TYSTYEFLDN TPGRILILVI MLTLGFPLYL LTNVSGKKYD  
RFTNHFDPLS PIFTERERIQ VALSDLGIVA VFYGLKFLVQ TKGFGWVMCM  
YGVFVIGLNS FIIIVITYLHH THLSSPHYDS TEWNWIKGAL TTIDRDFGLL  
NRVFHDVTHT HVLHHLFPYI PHYHAKEASE AIKPILGDYR MIDRTPFFKA  
MWREAKECIY IEQDADSKHK GTYWYHKM

**Figure 2 :** Peptide sequence of *Stokesia laevis* epoxxygenase (SEQ ID No.2).

	1				50
Stokesia	~~~~~	~~~~~	GTAGGTTTTG	GGTGTCCGGT	AGATCAGTGT
Vernonia	TTATGAAAGC	TCGATCCGGT	TTCGATCAAT	TCAAATCGAC	GAACACGAAA
Crepis	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
	51				100
Stokesia	TCGACCGAAA	TCCAACGCAT	TTTCTAATTT	GGATTTCAGA	AATCTGGGAG
Vernonia	TCGAACTCAA	CAATTCAAAT	CTGGAAATAT	TAATTGGATC	AAGCGGGCGG
Crepis	~~~~~	~~~~~	~~~~~	~~~~~	~~~~gagaag
	101				150
Stokesia	AAGGTAGCAG	AATGTCGGAT	TCATATGATG	ATC.....	.....GAATG
Vernonia	A...TATGAT	GATGTCGGAT	TCATGTGATG	ATCATGATCA	GCTGGTGAAA
Crepis	ttgaccataa	atcattttatc	aacatgggtg	ccggcgggtcg	tggtcggaca
	151				200
Stokesia	AAAGATCATG	ATATGGACGA	ACGAGCCCCG	ATTGATCCGG	CGCCATTCTC
Vernonia	GATGATCATA	ATATAAACGA	ACGTGCACCG	GTTGATGCGG	CACCATTCTC
Crepis	tcggaaaaat	cggtcatgga	acgtgtctca	gttgatccag	taaccttctc
	201				250
Stokesia	GTTAAGTGAT	CTAAAGAAAG	CAATCCCTGC	ACATTGCTTC	CGGCGATCCG
Vernonia	GTTAAGCGAT	CTAAAGAAAG	CAATCCCTCC	GCATTGCTTC	CAGCGATCTG
Crepis	actgagtga	ttgaagcaag	caatccctcc	ccattgcttc	cagagatctg
	251				300
Stokesia	CCGTCTGGTC	ATCCTGCTAC	GTAGTTCAGG	ATCTCATTAT	CACCTTCCTT
Vernonia	CCATCCGTTC	ATCGTGCTAC	GTTGTTCAGG	ATCTCATTAT	TACCTTCCTT
Crepis	taatccgctc	atcttactat	gttgttcaag	atctcattat	tgccctacatc
	301				350
Stokesia	TTATACACGG	TCGCCAACAC	CTACATTCCCT	CACCTCCCTC	CTCCTCTAGT
Vernonia	TTATACACGC	TCGCCAACTC	TTACATTCCCT	CTTCTTCCTC	CTCCTCTACC
Crepis	ttctacttcc	ttgccaacac	atatatccct	actcttccta	ctagtctagc
	351				400
Stokesia	TTACTTAGCA	TGGCCGGTTT	ACTGGTTTTG	CCAATCTTGC	ATCCTCACTG
Vernonia	TTACTTAGCA	TGGCCTGTTT	ACTGGTTTTG	CCAATCTTCG	ATCCTCACTG
Crepis	ctacttagct	tggcccgttt	actggttctg	tcaagctagc	gtcctcactg
	401				450
Stokesia	GTTTATGGGT	CCTCGGCCAT	GAATGCGGCC	ATCATGCCTT	TAGTGAGTAC
Vernonia	GTTTATGGGT	CATTGGCCAT	GAATGTGGCC	ATCATGCTTA	TAGTGAGTAC
Crepis	gcttatggat	cctcggccac	gaatgtggtc	accatgcctt	tagcaactac
	451				500
Stokesia	CAGTGGATTG	ATAACGCCGT	TGGATTCGTC	CTCCATTCCG	CTCTCCTCAC
Vernonia	CAGTGGGTTG	ATAACACCGT	TGGATTCATC	CTCCATTCCCT	TTCTTCTCAC
Crepis	acatggtttg	acgacactgt	gggcttcac	ctccactcat	ttctcctcac
	501				550
Stokesia	CCCTTACTTT	TCTTGGAAT	ACAGCCATCG	AAAGCACCAT	GCAAACACAA
Vernonia	ACCTTACTTT	TCTTGGAAT	ACAGCCATCG	AAAGCACCAT	GCCAACACGA

Crepis	cccgtatttc	tcttggaat	tcagtcaccg	gaatcaccat	tccaacacaa
	551				600
Stokesia	ATTCACCTCGA	AAACGAGGAA	GTTTACATTC	CTAGAACTCA	GTCCCAGCTC
Vernonia	ATTCACCTCGA	AAACGAGGAG	GTTTACATTC	CTAAAGCCAA	GTCCCAGCTC
Crepis	gttcgattga	taacgatgaa	gtttacattc	cgaaaagcaa	gtccaaactc
	601				650
Stokesia	AGGACTTACT	CCACATACGA	ATTTCTTGAC	AACACGCCTG	GTCGAATCCT
Vernonia	AGGAATTACT	CCAATTTCAA	ATTTCTTGAC	AACACCCCTG	GTCGAATCTT
Crepis	gcgcgt....	..atctataa	acttcttaac	aaccacactg	gtcggctgtt
	651				700
Stokesia	CATCTTGGTC	ATCATGTAA	CCTTAGGATT	TCCTTTATAC	CTCTTAACGA
Vernonia	CATTTTGCTT	ATCATGTGA	CCTTGGGCTT	TCCTTTATAC	CTCTTGACCA
Crepis	ggttttgatt	atcatgttca	ccctaggatt	tcctttatac	ctcttgacaa
	701				750
Stokesia	ATGTTTCAGG	CAAGAAGTAC	GATAGATTTA	CCAACCACTT	TGATCCATTG
Vernonia	ATATTTTCAGG	CAAGAAATAC	CAAAGGTTTG	CCAACCACTT	TGATCCGTTG
Crepis	atatttccgg	caagaaatac	gacaggtttg	ccaaccactt	cgaccccatg
	751				800
Stokesia	AGCCCGATCT	TCACCGAGCG	TGAGCGAATC	CAGGTGCGT	TATCAGATCT
Vernonia	AGCCCCATCT	TCAGTGAGCG	TGAACGAATC	CAGGTCGTGC	TATCGGATGT
Crepis	agtccaattt	tcaaagaacg	tgagcggttt	caggtcttcc	tttcggtatc
	801				850
Stokesia	TGGTATCGTT	GCAGTGTTTT	ACGGAATCAA	GTTTCTTGTA	CAAACAAAAG
Vernonia	GGGTCTCATT	GCTGTGTTTT	ACGGGCTTAA	GTTTCTTGTA	GCGAAAAAAG
Crepis	tggtcttctt	gccgtgtttt	atggaattaa	agttgctgta	gcaaataaag
	851				900
Stokesia	GATTTGGTTG	GGTGATGTGC	ATGTATGGAG	TTCCAGTGAT	AGGTCTGAAT
Vernonia	GGTTCGGTTG	GGTAATGCGC	ATGTACGGAG	CCCCAGTGGT	TGGGCTGAAT
Crepis	gagctgcttg	ggtagcgtgc	atgtatggag	ttccggtatt	aggcgtattt
	901				950
Stokesia	TCCTTCATTA	TCGTAATCAC	TTATCTGCAC	CACACACATC	TGTCGTCACC
Vernonia	GCCTTCATAA	TAATGATCAC	TTATCTCCAC	CACACCCATC	TGTCTTCGCC
Crepis	accttttttcg	atgtgatcac	cttcttgcac	cacacccatc	agtcgtcgcc
	951				1000
Stokesia	CCATTACGAT	TCAACCGAAT	GGAACGGAT	CAAAGGAGCC	TTGACCACAA
Vernonia	TCATTACGAT	TCGACCGAAT	GGAACGGAT	CAAAGGAGCC	TTGACTACAA
Crepis	tcattatgat	tcaactgaat	ggaactggat	cagaggggcc	ttgtcagcaa
	1001				1050
Stokesia	TCGACAGAGA	TTTCGGTCTC	CTGAATCGGG	TTTTCCACGA	CGTTACACAC
Vernonia	TCGATAGAGA	TTTCGGTCTC	CTGAATAGGG	TGTTCCATGA	CGTCACTCAC
Crepis	tcgataggga	ctttggattc	ctgaatagtg	ttttccatga	tgttacacac
	1051				1100
Stokesia	ACCCACGTGT	TGCACCATTT	GTTTCCCTAC	ATTCCACATT	ATCATGCAAA
Vernonia	ACACACGTGT	TGCATCATTT	GTTCCCGTAC	ATTCCACATT	ATCATGCAAA

Crepis	actcatgtca	tgcattcattt	gttttcatac	attccacact	atcatgcaaa
	1101				1150
Stokesia	GGAGGCAAGC	GAGGCCATCA	AGCCAATCTT	GGGTGATTAC	AGGATGATCG
Vernonia	GGAGGCGAGC	GACGCAATAA	AGCCGGTGTT	AGGGGAGTAT	CGGATGATCG
Crepis	ggaggcaagg	gatgcaatca	agccaatctt	gggcgacttt	tatatgatcg
	1151				1200
Stokesia	ACAGGACTCC	ATTTTTCAAA	GCAATGTGGA	GAGAGGCCAA	GGAATGCATT
Vernonia	ATAGGACTCC	GTTTTACAAA	GCAATGTGGA	GAGAGGCGAA	GGAATGCATC
Crepis	acaggactcc	aatttttaaaa	gcaatgtgga	gagagggcag	ggagtgcattg
	1201				1250
Stokesia	TACATCGAGC	AAGATGCAGA	CAGCAAGCAC	AAAGGGACAT	ATTGGTACCA
Vernonia	TACATCGAGC	CAGATGAAGA	TAAGAAGCAC	AAAGGTGTAT	ATTGGTACCA
Crepis	tacatcgagc	ctgat.....	.agcaagctc	aaaggtgttt	attggtatca
	1251				1300
Stokesia	TAAATGTAA	TCGATGATGG	AGTTTAGTTG	GAAATAATGA	CATGCAGCAT
Vernonia	TAAATGTGA	TACGAGCTGA	GTACGTAGTA	CGTTGTATGC	TTTGTAAACG
Crepis	taaattgtga	tcatatgcaa	aatgcacatg	cattttcaaa	ccctctagtt
	1301				1350
Stokesia	CCCTTTTGTA	TGCTTGAATC	GTTCTATTTT	TTTATATGTT	TTGTAAGATA
Vernonia	TTTTGTAAGA	TAAATAAATA	AATCTTGAAT	GAAGATAAAA	AAAAAAAAAA
Crepis	acgtttgttc	tatgtataat	aaaccgccc	tcctttggtt	gactatgcct
	1351				1400
Stokesia	AATAAGTAAA	TCTTTGAGTG	AAGATGGGGA	GCAGGAAACA	AGCAGAATAT
Vernonia	AAAAAAAAAA	AAAAAAA~~~	~~~~~	~~~~~	~~~~~
Crepis	aagccaggcg	aaacagttaa	ataatatcgg	tatgatgtgt	aatgaaagta
	1401				1450
Stokesia	AATACGCTAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAA~~	~~~~~
Vernonia	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
Crepis	tgtggttgtc	tggttttgtt	gctatgaaag	aaagtatgtg	gttgtcggtc

Figure 3

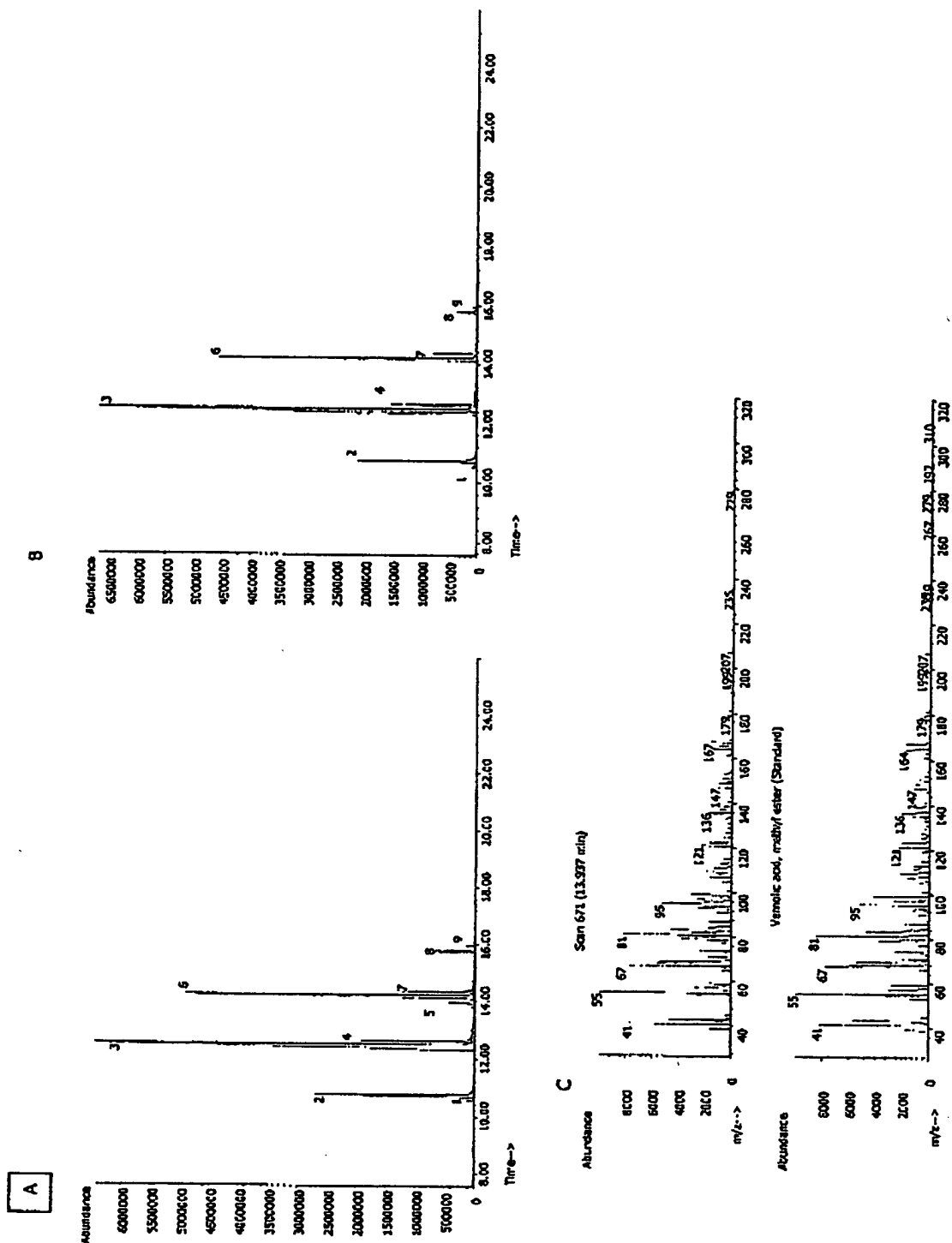


FIGURE 4

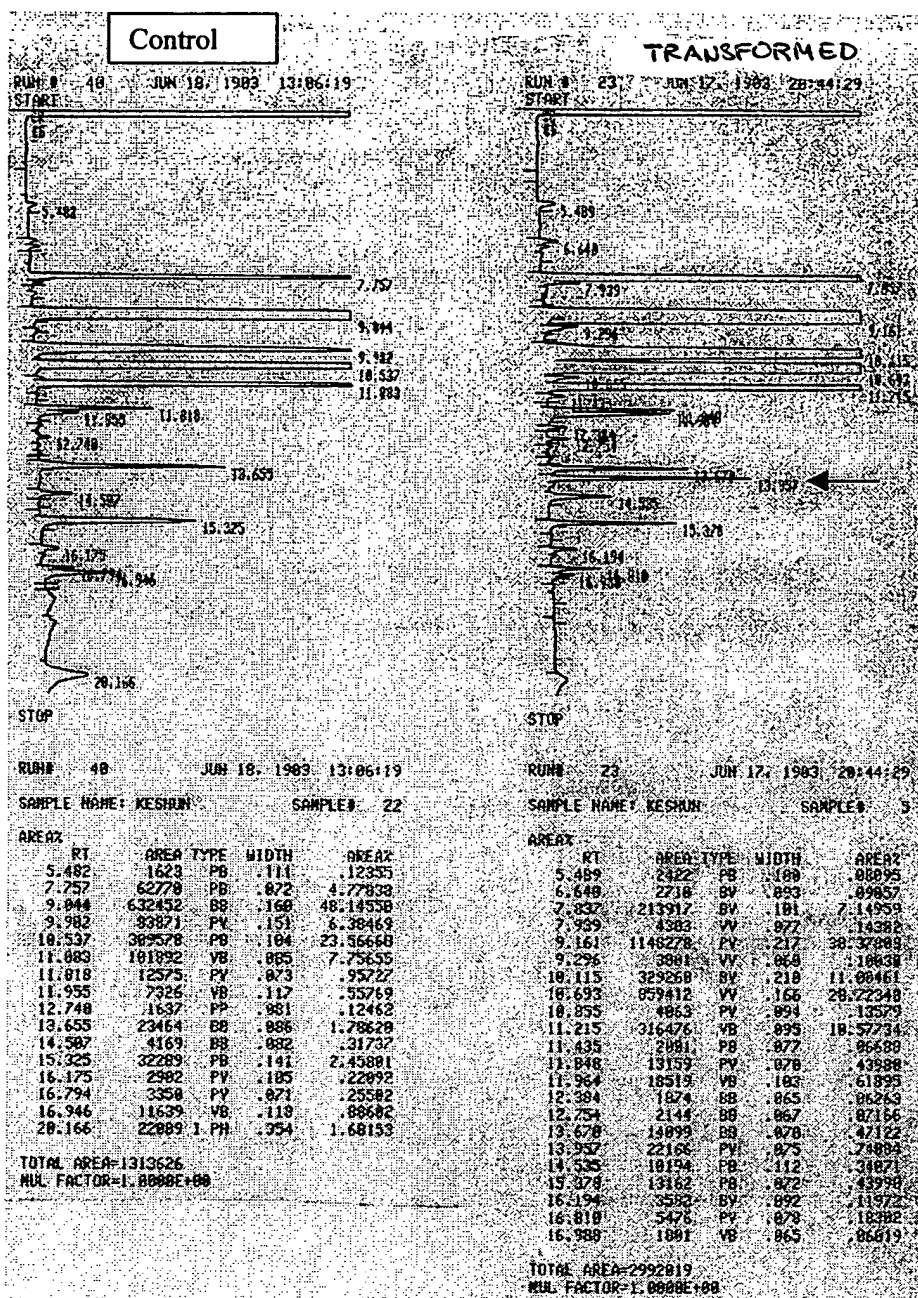


Figure 5